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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,796

01/25/2006

Stewart Lister Hay

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9648

40401 7590 03/03/2008  
Hershkovitz & Associates, LLC  
2845 Duke Street  
Alexandria, VA 22314

EXAMINER

MUROMOTO JR, ROBERT H

ART UNIT

PAPER NUMBER

3765

NOTIFICATION DATE

DELIVERY MODE

03/03/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@hershkovitz.net  
patent@hershkovitz.net

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,796	<b>Applicant(s)</b> HAY ET AL.	
	<b>Examiner</b> BOBBY H. MUROMOTO JR	<b>Art Unit</b> 3765	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38-65 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-65 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/24/2006</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 38-65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 38 recites "wherein all of said interchanging weft pair members interweave with at least one paper side warp and with at least one interchanging weft pair...", it is not clear how all of said interchanging weft pair members can interweave with another weft pair as all weft pairs are in a parallel and adjacent to each other.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 38-44, 45-47, 49, and 62-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Odenthal WO 02/14601 (citations are from the US equivalent disclosure US 6,904,942).

Odenthal discloses a composite fabric having upper warp (paper side) layer 10, lower warp (machine side) layer 12, at least one set of paper side wefts (18 or 20), at least one set of machine side wefts (18 or 20), weft pairs (18 and 20) that form one continuous weft path as in figures 2a and 2b and interweave with at least one paper side warp. One member of the pair (18 or 20) binding with at least one machine side warp as in figure 2b and the other member interweaving only with at least one paper side warp also seen in figure 2b (claim 1).

Figure 2b clearly shows the paper side layer comprising only paper side warp and interchanging weft pairs where one member is a binding weft and the other a top weft.

Figures 2a and 2b both show 'stiffening sections' as claimed.

Figure 2a shows stiffening sections spanning 5 warp pairs and 3 warp pairs as claimed.

Figure 2b shows the binder member of the pair only weaving one machine side warp as claimed.

Figure 2b clearly shows the binding member of the pair interweaving more than one paper side warp yarn as claimed.

Figure 2a clearly shows two stiffening sections or segments as in claim 45.

Odenthal discloses, "It is nevertheless theoretically possible for the entire weft furnish for the upper side 14 to be in the form of the support thread pair 18, 20." This anticipates 'at least 50%' and 'all' pairs providing 'two segments' as in claims 46 and 47, respectively.

The limitations in claim 49 are a measured resultant property of the fabric structure claimed. Since all structural and functional limitations of the claim and its intervening claim are disclosed it appears that the reference would inherently have a similar cover factor.

Figure 2a and 2b clearly shows at least two knuckles formed on the top surface of the paper side above each of the 'stiffening sections' by top member or binder member as in claims 62-64.

Figure 2b clearly shows a 3/2 or 1.5 ratio as in claim 65.

***Claim Rejections - 35 USC § 103***

Claims 48, and 50-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odenthal (as above citations taken from US equivalent disclosure).

Although Odenthal teaches essentially all of the limitations of the claimed invention, Odenthal does not specifically teach the specific paper side to machine side warp yarn diameter ratio in excess of .75, or the specific paper side and machine side warp diameters for the fabric (all of the claims recite paper side warp having smaller diameter than the machine side warp).

However, Odenthal does teach, 'the warp threads 8 of the lower side 16 are larger in diameter than the warp threads 8 of the upper side 14. Better support of the upper side 14 is obtained as a result by way of the lower side 16 and the diameter relationships selected.'

The ratio of paper side diameter to machine side diameters from .76-.99999 represents the machine side warp being larger than the paper side warp and all of the

Art Unit: 3765

specific diameters claimed in the instant 103 rejection are paired as the machine side warp being larger than the paper side warp. Therefore, to one of ordinary skill in the art of papermaking fabric production, these limitations are considered obvious variations of the inventive principle, as taught by Odenthal, that the use of larger diameter machine side warps and smaller paper side warps in multiple layered papermaking forming fabrics result in 'better support of the upper side of the fabric by way of the diameter relationships selected.'

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY H. MUROMOTO JR whose telephone number is (571)272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert H Muromoto, Jr./  
Primary Examiner, Art Unit 3765